

In the Claims

The following Listing of Claims replaces all prior versions in the application:

LISTING OF CLAIMS

1. (Currently amended) A system comprising:

a radio modem unit; and

an RF signal booster unit, wherein the booster unit is connectable to the radio modem unit with a connector adapted to transmit RF signals through a connection line capable of carrying, wherein a DC offset; and

auto-detect logic for detecting the DC offset in order at the connector is detected to determine whether the booster unit is connected to the radio modem.

2. (Original) The system of Claim 1, wherein the connector connects to a connection line between the radio modem unit and the booster unit.

3. (Currently amended) The system of Claim 1, wherein the offset detection circuitry-auto-detect logic is located within the radio modem unit.

4. (Currently amended) The system of Claim 1, wherein the offset detection circuitry-auto-detect logic includes an inductor to allow the DC offset to be placed onto the connector, but not allow radio frequency energy to pass up into the auto-detect circuit.

5. (Original) The system of Claim 1, wherein the booster unit includes an element to reduce the DC power level to low if the radio modem unit is connected to the booster unit.

6. (Original) The system of Claim 5, wherein the elements in the booster unit include an inductor.

7. (Original) The system of Claim 1, wherein the voltage at the connector of the radio modem unit is high if no booster unit is connected but is low if a booster unit is connected.

8. (Currently amended) A radio modem unit comprising:
a radio;
an RF signal connector operably connected to the radio, the connector being connectable to a RF antenna or a booster unit and including a connection line adapted to carry an RF signal and a DC offset; and
a detector unit adapted to detect a the DC offset at the connector to
determine whether the connector is connected to a booster unit.

9. (Canceled).

10. (Original) The radio modem unit of Claim 8, wherein the DC offset of the connector is high if no booster unit is connected but is low if a booster unit is connected.

11. (Original) The radio modem unit of Claim 8, wherein an inductor is used as part of an auto-detect circuit.

12. (Original) The radio modem unit of Claim 8, wherein the radio modem unit is connected to a booster unit, the booster unit including a circuit to pull the DC offset at the connector to low.

13. (Currently amended) A system comprising:
a radio modem unit; and
an RF signal booster unit, wherein the booster unit is connectable to the radio modem unit with a single coaxial connector adapted to transmit RF signals and a DC offset indicative of the presence of the booster unit, and wherein baseband signals are transmitted to the RF signal booster unit by way of the single coaxial connector by the radio modem and are used by the booster unit to prepare for transmission.

14. (Original) The system of Claim 13, wherein a connector line is connected between the connector at the RF signal booster unit to a connector at the radio modem unit.

15. (Original) The system of Claim 13, wherein the baseband signals are power control signals.

16. (Original) The system of Claim 13, wherein the power control signals are used to control the power and channel.

17. (Original) The system of Claim 13, wherein the RF signal booster unit includes a switch in the transmit line that prevents RF energy from being provided to a power amplifier in the booster unit until a valid power controller message is received from the radio modem.

18. (Canceled).

19. (Currently amended) An RF signal booster unit adapted to amplify RF signals from a radio modem, the booster unit including a switch that significantly attenuates the RF energy from the radio modem that is provided to a power amplifier in the booster unit by way of a connection line adapted to further carry a DC offset indicative of the presence of the booster unit until a valid power control message is received from the radio modem, the switch comprising a pair of diodes arranged back-to-back and disposed in the RF signal path, such that when the switch is in an ON position RF signals pass through the diodes from the radio modem to the booster unit, and when the switch is in an OFF position, RF signals are precluded by the diodes from effectively passing from the radio modem to the booster unit.

20. (Canceled).

21. (Previously Presented) The system of Claim 19, wherein when the switch is in the ON position, current flows through the diodes and the RF impedance of the switch is reduced, but when the switch is in the OFF position, current is not flowing through the diodes, and the RF impedance of the switch is high.

22. (Currently amended) Method of using a radio modem unit and an RF signal booster unit, the booster unit and radio modem unit connectable using a connector establishing a connection line, the method comprising:

in the radio modem unit, detecting a DC offset on the ~~connector~~ connection line to determine whether the booster unit is connected;
if the booster unit is connected, transmitting baseband signals on the ~~connector~~ connection line from the radio modem to the booster unit to allow the booster unit to prepare for transmission; and
thereafter, transmitting an RF signal on the connector from the radio modem to the booster unit.

23. (Canceled).

24. (Original) The method of Claim 22, wherein the baseband signal is the power control signal.

25. (Original) The method of Claim 24, wherein the power control signal includes a channel control and power level indications.